

IN THE CLAIMS

1. (Currently Amended) An acrylic copolymer composition comprising:
~~(A) an alkyl acrylate crosslinked polymer formed by the polymerization of 5-15 wt% of a~~
crosslinking agent and an alkyl acrylate monomer ~~constituting an alkyl acrylate crosslinked~~
~~polymer; and~~
~~a non-crosslinked copolymer formed by the polymerization of 55-90 wt% of methyl~~
methacrylate; ~~and with 5-40 wt% of at least one monomer selected from the group consisting of~~
~~an alkyl acrylate compounds and an alkyl methacrylate compounds, wherein the weights are~~
~~based on the whole weight of the crosslinking agent and the monomer components.~~
2. (Currently amended) The acrylic copolymer composition of claim 1, wherein the
alkyl acrylate crosslinked polymer has ~~the a~~ degree of swelling of 3-10.
3. (Canceled)
4. (Currently amended) The acrylic copolymer composition of claim ~~31~~, wherein the
crosslinking agent is selected from the group consisting of ~~aryl-allyl~~ methacrylate,
trimethylolpropane, triacrylate, and divinylbenzene.
5. (Currently amended) The acrylic copolymer composition of claim ~~31~~, wherein the
alkyl acrylate compound ~~for the crosslinked polymer~~ has a straight, branched, or cyclic alkyl
group of 1-18 carbon atoms.
6. (Currently amended) The acrylic copolymer composition of claim ~~31~~, wherein the
alkyl acrylate compound ~~for the crosslinked polymer~~ is one or more selected from the group
consisting of methyl acrylate, ethyl acrylate, n-butyl acrylate, lauryl acrylate, stearyl acrylate, 2-
ethylhexyl acrylate, and cyclohexyl acrylate.

7. (Currently amended) The acrylic copolymer composition of claim 1, wherein ~~in the monomer (C),~~ the alkyl acrylate compound for the non-crosslinked copolymer has a straight, branched, or cyclic alkyl group of 1-18 carbon atoms and the alkyl methacrylate compound for the non-crosslinked copolymer has a straight or cyclic alkyl group of 2-18 carbon atoms.

8. (Currently amended) The acrylic copolymer composition of claim 1, wherein ~~in the monomer (C),~~ the alkyl acrylate compound for the non-crosslinked copolymer is one or more selected from the group consisting of methyl acrylate, ethyl acrylate, n-butyl acrylate, lauryl acrylate, stearyl acrylate, 2-ethylhexyl acrylate and cyclohexyl acrylate, ~~and~~ the alkyl methacrylate compound for the non-crosslinked copolymer is one or more selected from the group consisting of n-butyl methacrylate, lauryl methacrylate, stearyl methacrylate, tridecyl methacrylate, i-butyl methacrylate, t-butyl methacrylate, 2-ethylhexyl methacrylate and cyclohexyl methacrylate.

9. (Currently amended) The acrylic copolymer composition of claim 1, ~~which~~ wherein the non-crosslinked copolymer has a weight average molecular weight of 1,000,000 to 12,000,000.

10. (Currently amended) A method for preparing an acrylic copolymer composition, which comprises the steps of:

~~preparing an alkyl acrylate crosslinked polymer having a degree of swelling of 3 to 10 in tetrahydrofuran and formed by emulsion polymerization, suspension polymerization, or solution polymerization of 5-15 wt% of a crosslinking agent and an alkyl acrylate monomer; and~~

~~preparing a non-crosslinked copolymer formed by the emulsion polymerization, suspension polymerization, or solution polymerization of -constituting an alkyl acrylate crosslinked polymer having the degree of swelling of 3 to 10; 55-90 wt% of methyl methacrylate; and 5-30 wt% of at least one monomer selected from the group consisting of an alkyl acrylate compound with an alkyl group of 1-18 carbon atoms and an alkyl methacrylate compound with an alkyl group of 2-18 carbon atoms,~~

~~wherein the weights are based on the whole weight of the crosslinking agent and the monomer components and the acrylic copolymer composition comprises the crosslinked polymer and the non-crosslinked copolymer.~~

11. (Currently amended) The method of claim 10, wherein the emulsion polymerization comprises:

(a) (i) mixing 5-15 wt% of the crosslinking agent and the alkyl acrylate monomer to prepare an emulsion containing the alkyl acrylate crosslinked polymer having the degree of swelling of 3 to 10 and ~~then~~ adding 27.5-45 wt% of the methyl methacrylate, 2.5-20 wt% of the at least one monomer selected from the group consisting of the alkyl acrylate compound with an alkyl group of 1-18 carbon atoms and the alkyl methacrylate compound with an alkyl group of 2-18 carbon atoms, an emulsifier, a polymerization initiator, and a redox catalyst, to the emulsion containing the alkyl acrylate crosslinked polymer or (ii) mixing 27.5-wt% of the methyl methacrylate, 2.5-20 wt% of the at least one monomer selected from the group consisting of the alkyl acrylate compound with an alkyl group of 1-18 carbon atoms and the alkyl methacrylate compound with an alkyl group of 2-18 carbon atoms, ~~the an~~ emulsifier, ~~the a~~ polymerization initiator, and ~~the a~~ redox catalyst ~~to polymerize the monomers~~ and ~~then~~ adding 5-15 wt% of the crosslinking agent and the alkyl acrylate monomer to the mixture; and

(b) further adding 27.5-45 wt% of the methyl methacrylate, 2.5-20 wt% of the at least one monomer selected from the group consisting of the alkyl acrylate compound with an alkyl group of 1-18 carbon atoms and the alkyl methacrylate compound with an alkyl group of 2-18 carbon atoms, ~~the an~~ emulsifier, ~~the a~~ polymerization initiator, and ~~the a~~ redox catalyst, to the resultant mixture of step (a).

12. (Currently Amended) A vinyl chloride resin composition comprising a vinyl chloride resin and 0.1-20 parts by weight of an acrylic copolymer composition prepared according to the method of claim 10, based on the 100 parts by weight of the vinyl chloride resin.

13. (Currently Amended) A vinyl chloride resin composition including a vinyl chloride resin and 1-30 parts by weight of a mixture comprising 5-30 wt% of an acrylic copolymer composition prepared according to the method of claim 10 and 70-95 wt% of an impact modifier, based on 100 parts by weight of the vinyl chloride resin.

14. (original) The vinyl chloride resin composition of claim 13, wherein the impact modifier is selected from the group consisting of acrylonitrile-butadiene-styrene (ABS), methyl methacrylate-butadiene-styrene (MBS), and acrylic compounds.